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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/341,994	10/28/1999	ROBERT J. FRETZ	022577-579	5901

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EXAMINER
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DABNEY, PHYLESHA LARVINIA

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 09/24/2002

14

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/341,994

Applicant(s)

FRETZ ET AL

Examiner

Phylesha L Dabney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 15 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6-11, 13, 16--29 is/are rejected.
- 7) ☐ Claim(s) 12, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The request filed on 5 May 2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/341,994 is acceptable and a CPA has been established. An action on the CPA follows. Claims 1-29 are pending.

#### *Information Disclosure Statement*

1. The information disclosure statement filed 3 March 2000 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56© most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

#### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "tube shaped to have portion which engages the ear" of claim 21 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Fig. 3-5  
ok

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "inserting tool..." of claim 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Fig. 22  
ok

*Claim Objections*

4. Claim 8 is objected to because of the following informalities: "an opening for receiving..." does not appear to a part of the claim. Appropriate correction is required.

cl. 8 amended  
ok

*Claim Rejections - 35 USC § 112*

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20 and 21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to teach or to show "the tube portion which engages the ear" as claimed in claim 21; therefore, the Examiner has rejected the claim without including this limitation until Applicant submits appropriate correction.

✓ fig. 5

The specification fails to teach or to show "the inserting tool" as claimed in claim 20. Appropriate correction is required.

← fig. 22

ok

6. The following is a quotation of the second paragraph of 35 U. S. C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 6 are rejected under 35 U. S. C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the terms "approximately perpendicular" in the claim is a relative term which renders the claim indefinite. The terms "approximately perpendicular" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

ok  
Fig. 2  
1st bend - 20  
2nd bend - 24

Regarding claim 6, it is unclear whether the Applicant intend to use mass (represented in grams) or weight (which is a product of mass and gravitational pull).

ok  
cl. 6 amended.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 7-8, 13, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Arndt (U.S. Patent No. 5,204,917).

Regarding claims 1, 7-8, and 13, Arndt discloses a hearing aid case (figs. 1-17) comprising a case body (10) containing a microphone (16), a processor unit (18), and a speaker (14); a battery (20); a tube attachment end (near 80) including an end surface (tip of 80), a nipple (80), a side surface (side of 80), a key (screw threads of 80), and a keyway (threading of 12).

maintain  
cl. 13

Regarding claim 16, as shown in figures 1A and 1B, Arndt discloses the end surface (tip of 80) is substantially perpendicular to the side surface (side of 80).

8. Claims 1-3, 5, <sup>move to 103(a)</sup> (10), 20-24 and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Pluvinae et al (U.S. Patent No. 5,987,146).

Regarding claims 1-3, 5, and 10, Pluvinae discloses a hearing aid system comprising a hearing aid case (40), a tube (10 or 10/30) having a first end and second ends (fig. 1) with a first and second bend (fig. 5a, ,a-c), and an ear tip (12).

Regarding claims 20 and 21, Pluvinae discloses a hearing aid device comprising an eartip (12) and a tube (10 <sup>or</sup> ear 10/30).

Regarding claim 22, Pluvinae discloses the eartip (12) having a flower-shape with a plurality of petals (21).

Regarding claim 23, Pluvinae discloses the eartip (12) including a single blade (14) extending from a central core configured so that the blade fits behind the ear tragus (fig. 5b).

Regarding claim 24, Pluvinae discloses the eartip (12) having a conically-shaped member (12) having a first cross sectional dimensional smaller than the second cross sectional dimension (figs. 1, 5b, 4a-d).

Regarding claim 27, Pluvinae discloses the device comprising a behind the ear (BTE) hearing aid case (40) attached to the first end of the tube (10 or 10/30).

Regarding claim 28, Pluvinae discloses a portion (30) of the tube (10, 30) extends over the ear of the user.

Regarding claim 29, Pluvinae discloses the eartip (12) including a wax guard (18a-b).

9. Claims 21 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Henderson (U.S. Patent No. 3,080,011).

Regarding claim 21, Henderson discloses an eartip (10) and tube (13-17).

Regarding claim 25, Henderson discloses an eartip (10, 20) having a dome-shaped member (20-25) having an annular skirt (25).

move to 103(a)

10. Claims 21 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Harada (U.S. Patent No. 3,934,100).

Regarding claim 21, Henderson discloses an eartip (10) and tube (13-17).

Regarding claim 26 Henderson discloses a dome-shaped member eartip (10-16, 21-25) having vents (13-15, 24).

move to 103(a)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-3, 5, ~~10~~, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada (U.S. Patent No. 3,934,100).

Regarding claims 1-3, and ~~10~~, Harada teaches a hearing system having a tube (11, conduit) and a eartip (10). Harada does not teach the hearing system having a hearing aid case

worn behind the ear to contain: a microphone, a processor unit, and a speaker delivering amplified sounds to an output connector of the case. However, the Examiner takes official notice that it is well-known in the art for a behind the ear (BTE) hearing aid to be connected to an eartip, such as described by Harada for securing the BTE in the region behind the ear and to contain such components for minimizing the size of the ear piece inserted into the ear. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for a BTE hearing aid case to be attached to the invention of Harada and to contain such components for the reason stated above. Also, Harada does not teach the tube having a preformed shape including a first bend extending from the case over the top of the ear of the user. However, the Examiner takes official notice that it is well-known in the art for the tube attached to a behind the ear (BTE) hearing aid to act in this manner for securing the behind the ear hearing aid into place. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the tube to be attached to a BTE and eartip in the manner stated above forming securing means. Harada teaches the tube having a second bend extending from an outside of the ear into an ear canal of the user (figs. 1-3).

Regarding claim 5, Harada teaches the tube has a inner diameter of about 0.9 mm or less and an outer diameter of about 1.6 mm or less (col. 2 lines 2-5).

Regarding claim 21, Harada teaches a hearing aid device comprising an eartip (10) and a tube (20) having a first end and a second end, and the tube (20) having sufficiently rigidity to position and hold the eartip in the ear canal when the tube is engaged with in the ear. Harada does not teach the tube having a portion which engages the ear (see 112 first rejection above).



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11. Claim 4, 6, 9, 11, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada (U.S. Patent No. 3,934,100) or Pluvinage (U.S. Patent No. 5,987,146).

Regarding claim 4, Neither Harada nor Pluvinage teach the tube formed of a material having a durometer of about 65 or 85 Shore D. However, the Examiner takes official notice that it well-known in the art to use plastic material with hardness between 65 to 85 Shore D when constructing hearing aids for durability and strength. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the tube of Harada or Pluvinage could have been made of a plastic material with the durometer hardness stated above for durability and strength.

Regarding claim 6, Neither Harada nor Pluvinage teach the hearing aid case including a battery having a weight of 1.5 grams or less. However, the Examiner takes official notice that it is notoriously well-known in the art for a BTE hearing aid to include a battery, i.e. Nicad or lithium or nickel-metal-hydride, having a mass of 1.5 grams or less for providing power without requiring a lot of space. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a battery as claimed for supplying power.

Regarding claim 9, refer to claims 4 and 5.

*move  
Cl-10* ~~Regarding cl. 10, pluvinage or Harada~~ (see pg. 5-6)

Regarding claim 11, neither Harada nor Pluvinage teach the tube being formed at high temperature to retain the first and second bend. However, the examiner takes official notice that it is known in chemical processing to heat plastic materials at high temperatures to make them malleable, and cool this plastic into rigid structure, such as the tube of Harada or Pluvinage, to promote proper fit and alignment. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the tube of Harada or Pluvinage at high

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temperature to make it malleable and cool this tubing into a rigid structure to promote proper fit and alignment with the ear of the user.

Regarding claims 17-19, Neither Harada nor Pluvillage teach a kit of parts with a plurality of tubes, eartips, and hearing aid cases. However, the Examiner takes official notice that it is well-known in the art that individual's ears are not universal which requires different size hearing parts for fit and comfort of each individual. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for an audiologist during testing and fitting of hearing aid parts to different users to have multiple tubes, eartips, and cases for servicing different patients.

#### *Allowable Subject Matter*

12. Claims 12, 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phylesha L Dabney whose telephone number is 703-306-5415. The examiner can normally be reached on Mondays, Tuesdays, Wednesdays, Fridays 8:30-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

(703) 872-9314, for formal communications intended for entry and for informal or draft communications, please label "Proposed" or "Draft" when submitting an informal amendment.

(703) 306-0377, for customer service questions.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

PLD

  
September 18, 2002

  
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